

Serial No. 09/714,554

ASA-947

REMARKS

Claims 1, 4, and 8-11 are pending.

In the Final Rejection dated October 3, 2003, the Examiner rejected claims 1 and 8 under 35 U.S.C. § 102(e) as being anticipated by Haines et al U.S. Patent No. 6,496,313 (Haines); claims 1 and 8 under 35 U.S.C. § 102(e) as being anticipated by Yasumasa JP 07-320418 (Yasumasa); claims 4 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Haines in view of Gray U.S. Patent No. 5,898,534 (Gray); claim 9 under 35 U.S.C. § 103(a) as being unpatentable over Haines in view of Sassa U.S. Patent No. 6,098,077 (Sassa); and claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Haines in view of Gray and further in view of Sassa. The Applicants traverse these rejections as follows.

Independent claims 1 and 4 have been limited by requiring the step or function of limiting a number of retries so that the reproduced data can be transferred within a specified necessary period of time. As set forth in the present specification on page 3, lines 22-24 and page 11, line 21 through page 15, line 7, a preferred embodiment of the invention overcomes the dual prior art problems of transmitting erroneous data and transmitting continuity-sensitive data (such as audio-visual data) within a period of

Serial No. 09/714,554

ASA-947

time necessary to prevent annoying gaps in transmission. As described in the specification, when transmitting continuity-sensitive data such as audio-visual data, errors on the single-bit level can be tolerated relatively easily due to the high volume and bandwidth of the audio-visual data. However, discontinuities in transmission/reception of the data, which can be caused by committing the transmission to numerous data retries to recover erroneous data, cannot be so easily tolerated. Thus, according to the present invention, the prior art is distinguished and prior art problems overcome by limiting data retries to a number such that the specified time period necessary for the appropriate transmission of data is not compromised by attempts to recover data errors.

Haines represents known prior art in which the data retries are not limited, the overriding objective of Haines being to ensure that the sequential synchronous decoding of the data fields does not result in a loss of data integrity due to data bit errors. Note, for example, column 3, lines 26-61.

In light of this difference from the prior art, the claims, amended by requiring that the number of retries be limited so that reproduced data can be transferred within a specified necessary time, are patentable.

Serial No. 09/714,554

ASA-947

Furthermore, dependent claims 8 and 10 have been amended to required that error information be added at the head of or at the end of the reproduced data and forwarded to the host system in a serial manner. Independent claim 4 was already limited by a function of outputting a portion of the reproduced data, remains of the data, and error information in a serial manner. Against this limitation, the Examiner cited Gray. The Examiner refers to Figure 1 of Gray, which shows error correction on the input (write) side of the recording/reproduction system. On the reproduction side, the serial data stream output at node 124 is a reproduction of the recorded data, without error information added at the head or end of the reproduced data; rather, the data stream is interleaved with error correction information, which is deinterleaved at error correction decoder 126 to remove added bits inserted by the error correction encoder during the write process, to reproduce the original data stream at node 128. See column 7, lines 4-17. Accordingly, Gray does not teach the claimed step or function of generating error information and adding the error information at the head of or at the end of the reproduced data for forwarding to the host system by way of the same connection interface as the reproduced data in

Serial No. 09/714,554


ASA-947

a serial manner. Consequently, the combination of Haines with Gray does not teach this feature of the claimed invention.

Moreover, no combination of the prior art teaches both steps/functions of limiting the number of retries so that the reproduced data can be transferred within a specified necessary time, and forwarding error information added at the head of or end of the reproduced data and forwarding the same to the host system by way of the same connection interface in a serial manner.

In view of the foregoing remarks and amendments, Applicants request reconsideration of the rejection and allowance of the claims.

Respectfully submitted,


Daniel J. Stanger
Registration No. 32,846
Attorney for Applicants

MATTINGLY, STANGER & MALUR
1800 Diagonal Road, Suite 370
Alexandria, Virginia 22314
Telephone: (703) 684-1120
Facsimile: (703) 684-1157
Date: March 3, 2004